OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Advanced GCE

INFORMATION AND COMMUNICATIONS TECHNOLOGY 2517

ICT Systems and Systems Management

Tuesday **24 JANUARY 2006** Morning 1 hour 30 minutes

No additional materials are required.
Candidates answer on the question paper.

Candidate Name	Centre Number	Candidate Number

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name in the space above.
- Write your Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, in the spaces on the question paper.
- Read each question carefully and make sure you know what you have to do before starting your answer.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is 90, of which 4 marks are allocated to the assessment of the quality of written communication.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE		
1		16
2		17
3		34
4		9
5		10
QWC		4
TOTAL		90

This question paper consists of 14 printed pages, 1 lined page and 1 blank page.

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For Examiner's Use

1 A company sells a range of goods to the public. The company has a Head Office and several stores around the country. The goods that the stores sell are described in a catalogue. Customers can go to a store and buy an item that is shown in the catalogue if it is in stock, or they can order the item using the Internet.

(a) The company has many internal resources.

(i) Give **two** accommodation resources relevant to this company.

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(ii) Give **two** human resources relevant to this company.

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(iii) Give **two** technological resources relevant to this company.

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(b) When ordering on the Internet data and information are exchanged.

(i) Define the terms 'data' and 'information'.

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(ii) Using an example from this ordering process show how data differs from information.

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(c) For each of the following give an example of information that could be exchanged and state its purpose:

(i) between the store and the customer

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(ii) between the store and Head Office

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(iii) between Head Office and the public.

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The company uses a modern computer-based information system in each store. Customers are able to find out if the item they want is in stock by entering a catalogue number at a terminal in the store.

2 **(a)** Describe **three** characteristics that would be necessary in this system.

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(b) Explain an advantage to the customer and an advantage to the company of using modern technology for such a system.

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For Examiner's Use

(c) The company uses both batch and real-time processing systems.

Discuss the differences between these two types of processing giving examples of how the company might use each system.

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For Examiner's Use

3 **(a)** Head Office wants to upgrade the existing system. A project team is formed to carry out the task. One role will be that of the project manager.

Identify **three** other roles of members of this project team and in each case state a responsibility of that team member.

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For Examiner's Use

(b) The project team decide to create custom-written software for a new computer-based information system which will be used by the customers in the stores.

(i) Describe the steps involved in producing this software.

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(ii) Give the advantages and disadvantages of producing a custom-written solution rather than using an off-the-shelf solution.

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(c) The new system will be installed into the stores for the customers to use. Two implementation methods are considered: a phased installation or a pilot installation.

(i) Describe phased and pilot installations.

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(ii) Choose **one** of the methods and give your reasons for choosing it for this application.

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(d) Computer programs had to be written for the custom-written solution. A translator, a linker and a loader were all used during this process.

Describe a translator, a linker and a loader.

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(e) The new computer-based information system will be used by the customers in the stores.

Give **three** different modes of navigation of the user interface and for each give a reason why it is suitable for the system.

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For Examiner's Use

4 Before the proposed new system was introduced the management of the change was carefully considered.

Discuss the importance of consultation, participation and communication when managing this change, considering the needs of the employees and the customers.

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5 **(a)** The company employs buyers who travel all over the world looking for bargains to sell in the stores. The buyers use a nomadic network environment.

(i) Describe the characteristics of a nomadic network environment.

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(ii) Give **two** benefits for the buyers of using a nomadic network environment.

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For Examiner's Use

(b) Discuss how hardware and software advances such as voice input to order goods, may affect the way stores are run in the future.

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